

Date: Monday, 29/10/2007 12:50:31 PM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 35362
 Estimate Number : 10250
 P.O. Number : N/A
 This Issue : 29/10/2007 S.O. No. : N/A
 Prsht Rev. : NC
 First Issue : N/A Type : MACHINED PARTS
 Previous Run : 35362
 Drawing Name : MOUNTING BRACKET
 Part Number : D2053
 Drawing Number : D2053 REV-B
 Project Number : N/A
 Drawing Revision : B under revision
 Material : N/A
 Due Date : 30/11/2007 Qty: 30 Um: 20 Each
 Written By :
 Checked & Approved By :
 Comment : Est D 02.03.18 Added Rev.B NG
 (Issue this IPP with part number D2052)
 Est Rev E now water jet 07-10-25 DD

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M5052H32S090 5052-H32 .090 Sheet



Comment: Qty.: 0.0404 sf(s)/Unit Total : 0.8085 sf(s)
 Material: 5052-H32, 0.090" Thick
 (M5052H3S.090)
 Batch: M 3019 HB 07-11-8

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET
 1-Cut as per Dwg D2053
 Dwg Rev: PRE L.
 Prog Rev: PRE L.

HB 07-11-8

2-Deburr if necessary

07/11/09 (31)

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

07-11-15 (31)
 counted.

5.0 BRAKE NC NC BRAKE



Comment: NC BRAKE
 Form as per Dwg D2053 using CNC Brake

JB

07/11/27

(31)

Date: Monday, 29/10/2007 12:50:31 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: MOUNTING BRACKET

Job Number: 35362

Part Number: D2053

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

counts
07/12/11 (X31)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005

de

HA

07-12-12

(X31)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Black Sandtex (Ref 4.3.5.8) as per QSI 005 4.3

M 100700

BR

08-01-08

(31)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

MH

08/04/08

(31X)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 9

8.1.19

SD

(31X)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/10/11

(31)

Job Completion



2008/1/10

U

Date: Thursday, 10/25/2007 10:05:51 AM
User: Kim Johnston

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	MOUNTING BRACKET
Job Number :	35362	Part Number :	D2053
Estimate Number :	10250	Drawing Number :	D2053-REV B
P.O. Number :		Project Number :	N/A
This Issue :	10/25/2007	Drawing Revision :	B
Prsht Rev. :	NC	Material :	
First Issue :	/ /	Due Date :	11/30/2007
Previous Run :	28201	Qty:	20
Written By :		Um:	Each
Checked & Approved By :			
Comment :	Est D 02.03.18 Added Rev.B NG (Issue this IPP with part number D2052)		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M5052H32S090	5052-H32 .090 Sheet
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Comment: Qty.: 0.0677 sf(s)/Unit Total : 1.3545 sf(s)
Material: 5052-H32, 0.090" Thick Batch _____
(M5052H3S.090)
Note: 1 Blank makes D2053 (Qty 1), D2052 (Qty 2)

W. H. H. H. H.



2.0	SHEAR	SHEAR
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Comment: SHEAR
Cut blanks 4.200" x 10.300", Grain along 4.200"

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1
Machine as per folio D2053
Identify as D2053

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
		<i>Permit change change</i>					

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: D Date: 08/01/11
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/12/14	#	Drill a 0.063" hole as per Dwg. D2053, for Powder coating.	<i>[Signature]</i> 07/12/14	Change Program for water jet	<i>N/A</i>	<i>[Signature]</i> 07/12/14	<i>[Signature]</i> 07/12/14	<i>[Signature]</i> 07/12/14
				Drill hole as per Dwg. D2053	FF 07/12/10			
				QC Inspection	<i>N/A</i>			
				Re Abolish as per D2005	07-12-21 (X10) <i>[Signature]</i>	<i>[Signature]</i> 2/12/21		<i>[Signature]</i> 07/12/14

NOTE: Date & initial all entries

Date: Thursday, 10/25/2007 10:05:51 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: MOUNTING BRACKET

Job Number: 35362

Part Number: D2053

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1
Deburr

7.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE
Form as per Dwg D2053 using CNC Brake

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

9.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
Acid etch and Alodine as per QSI 005

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING
Powder Coat Black Sandtex (Ref 4.3.5.8) as per QSI 005 4.3

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

12.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Identify and Stock
Location: _____

13.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN #	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2053	REV. B SHEET 1 OF 1
DATE 02.03.12		TITLE BRACKET	SCALE 1:1
A	92.01.12	NEW ISSUE	
B	02.03.12	Ø0.635 WAS Ø0.437; 0.635 WAS 0.325	

RELEASED
02.03.13

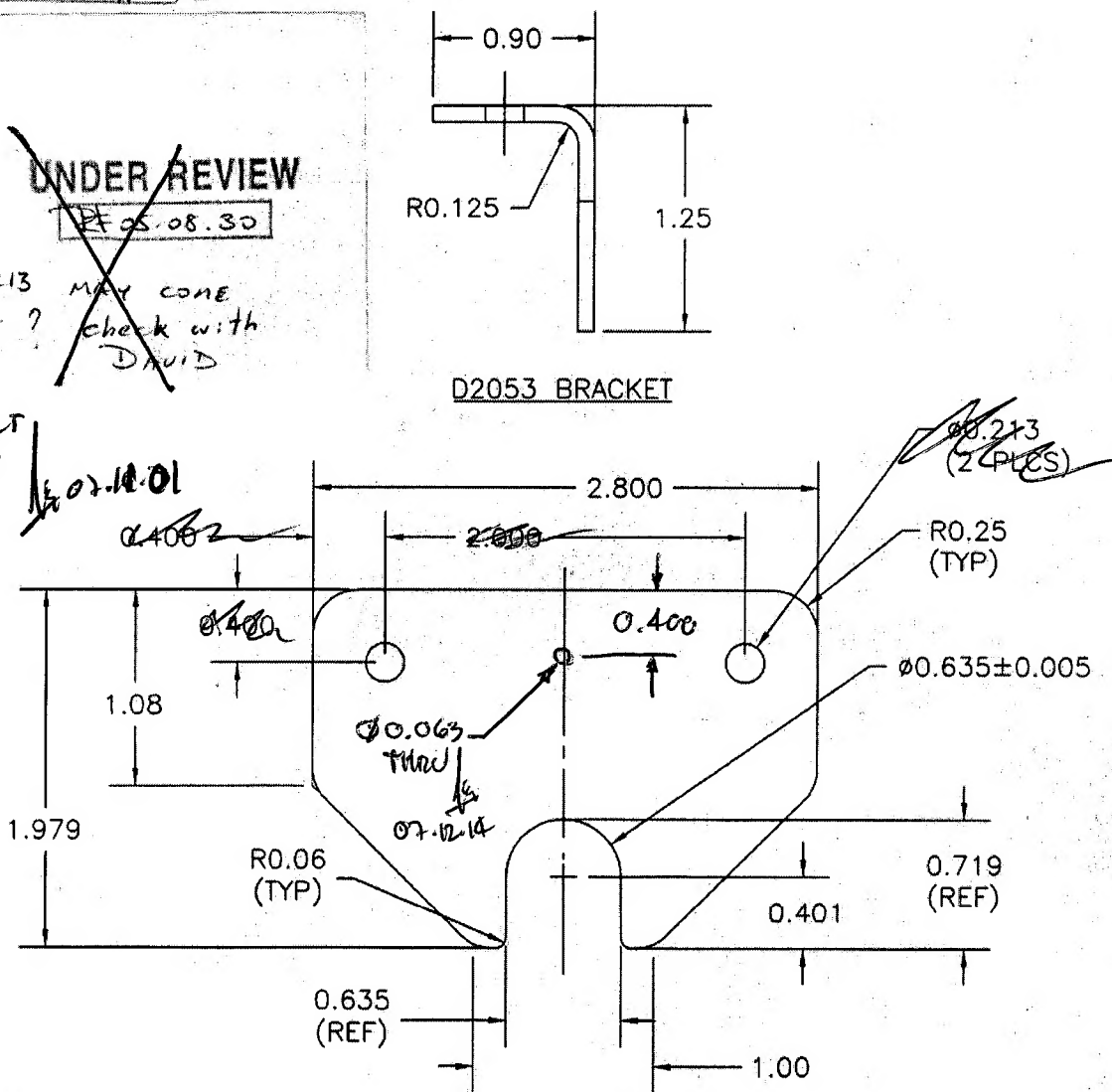
UNDER REVIEW

RF 05.08.30

Ø 0.213 MAY COME
OUT? CHECK WITH
DAVID

MAKE PART
WITHOUT
HOLES.

02.10.01



MATERIAL: 5052-H32/-34 PER AMS 4016/4017 OR QQ-A-250/8, 0.090
FINISH: POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 0.18 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 35362

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David Duval

From: Marc Bellavance [mbellavance@dartaero.com]
Sent: Thursday, November 01, 2007 2:54 PM
To: 'David Duval'
Subject: FW: D206-558 -> D2053 Bracket
Attachments: D2053-b.dxf

Dave,

Please find attached DXF files for D2053 Bracket.
Take note that the holes are removed (see David Shepherd's email below).
The drawing will be updated accordingly.
Don't hesitate if you need Eng. to sign-off deviations on W/Os.

Marc Bellavance
Internal Support/Product Improvement

DART aerospace Ltd.

Tel: 613-632-5200 Ext. 240
Fax: 613-632-9311
E-mail: mbellavance@dartaero.com
Web: www.dartaero.com

From: David Shepherd [mailto:dshepherd@dartaero.com]
Sent: November 1, 2007 2:49 PM
To: 'Marc Bellavance'
Subject: RE: D206-558 -> D2053 Bracket

Recommend making parts without holes from now on.

David

From: Marc Bellavance [mailto:mbellavance@dartaero.com]
Sent: Thursday, November 01, 2007 9:57 AM
To: 'David Shepherd'
Subject: D206-558 -> D2053 Bracket
Importance: High

David,

I got an e-mail from David Duval asking for D2053 Rev. B DXF file.
He needs this to create the waterjet program to manufacture the flat pattern of the part.

Looking at the drawing, I have noticed that it is under review... since August 2005.
Roberto put it under review and he added this note: "Ø0.213 may come out? Check with David".

I have looked at D206-558 Installation Instructions.
The instructions to install the D2053 bracket indicate to pick up on existing nut plates (see page 4, note 3) but it is not specified whether the installer is required to drill holes through D2053 or not. I'm assuming that the holes must be there already.

Was there any plan to remove the holes?

11/1/2007

If this is the case, we would need to update the IIN accordingly.
We might also need to update the ICA as well.

Marc Bellavance
Internal Support/Product Improvement

DART aerospace Ltd.

Tel: 613-632-5200 Ext. 240

Fax: 613-632-9311

E-mail: mbellavance@dartaero.com

Web: www.dartaero.com

No virus found in this incoming message.

Checked by AVG Free Edition.

Version: 7.5.503 / Virus Database: 269.15.17/1103 - Release Date: 11/1/2007 6:01 AM

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Version: 7.5.503 / Virus Database: 269.15.17/1103 - Release Date: 11/1/2007 6:01 AM

11/1/2007